CENTRAL INTELLIGENCE AGENCY
Directorate of Intelligence
2 October 1969

INTELLIGENCE MEMORANDUM

# North Vietnam's Overland Alternative to Seaborne Imports

## Introduction

North Vietnam relies on ocean transport to bring in about 85 percent of its annual imports, principally through the port of Haiphong. A closure of the port of Haiphong and an imposed denial of sea access to North Vietnam would seriously disrupt North Vietnam's seaborne trade and force an extensive revamping of normal transport arrangements. North Vietnam would be forced to depend primarily on the overland route from China for the continued import of vital war-supporting materiel and economic goods. This memorandum is a preliminary examination of the process by which the seaborne import trade would be transferred to overland routes. The following assumptions are used in making the analysis:

1. A US mining program has successfully denied access to North Vietnam's major and minor ports to both oceangoing and coastal shipping.

2. The North Vietnamese have opted not to contest the mining program and to transfer all import trade to the overland routes from Communist China.

3. There is sufficient Soviet and Chinese cooperation that strains in their relations are not a limiting factor in facilitating the overland movement of traffic.

I. The Traffic Volume

1. During the 12 months ending on 30 June 1969, North Vietnam imported by sea an average of 5,200 tons/day of economic and war-related materials. Total seaborne imports for the period are shown in the following tabulation:

| Goods | Thousand Tons | Percent |
|---|---|---|
| Foodstuffs | 890 | 47 |
| Fertilizer | 110 | 6 |
| Petroleum | 330 | 17 |
| Timber | 30 | 2 |
| General and miscellaneous | 530 | 28 |
| *Total* | *1,890* | *100* |

2. Rail imports during the same period were on the order of 300,000 tons. Thus if North Vietnam were to attempt to maintain the normal flow of imports the total volume of goods to be moved would be about 2.2 million tons.

The Immediate Diversion Problem

3. Our analysis of 1968 shipping to North Vietnam indicates that on the average about 16 ships were en route to North Vietnam at any one time. These ships would be carrying about 70,000 tons of goods, including an estimated 7,000 tons of petroleum. An immediate task, therefore, would be the diversion of these ships to an alternate port, such as Fort Bayard, or their recall to home ports where the goods would be rerouted overland. On the basis of the probable average disposition of these ships and assuming a decision not to recall ships that are beyond the half-way point on their trip, we believe that the following decisions would be made. Three ships en route from Black Sea or Baltic ports with about 17,000 tons of cargo would be recalled; four ships with an estimated 23,000 tons of cargo would be diverted to Fort Bayard. Of the ships en route

from Chinese and Soviet Pacific ports we estimate that five ships with an estimated 16,000 tons of cargo would be recalled and four ships with an estimated 14,000 tons of cargo would be diverted to Fort Bayard. The total to be diverted to Fort Bayard would be 37,000 tons. These diversions could be made very quickly by using shore to ship communications and the added voyage time would be only 1 to 2 days longer than if the ships had proceeded to Haiphong.

II. The Normalization of Overland Traffic

4. The normalization of overland traffic would raise daily traffic flows to North Vietnam to an average of about 6,000 tons a day of which about slightly over 3,000 tons a day would be routed by the Trans-Siberian railroad. Only 1,200 tons of the traffic to be moved on the Trans-Siberian would be traffic diverted from normal movement by sea. This would be a light burden on a rail line with a capacity estimated roughly to be about 50 trains or 100,000 tons each way per day. The addition of 1,200 tons a day would in real terms be the equivalent of only one additional train per day. A preliminary judgment indicates that the reorientation of traffic from Black Sea or Baltic Sea ports to the Trans-Siberian railroad could, with the requisite priorities, be accomplished in about two weeks. By the end of a two-week period, therefore, overland traffic from North Vietnam via the Trans-Siberian railroad should be pretty well normalized. In view of the fact that rail traffic to China has declined so drastically in recent years, and the transshipment facilities have been kept intact, it seems unlikely that transshipment of cargoes from Soviet to Chinese railroads would delay the movement of this traffic to any significant degree.

The Chinese Problem

5. The convergence of all North Vietnamese import traffic on the Chinese railroads would represent a daily tonnage of 6,000 tons of goods. This volume

is equivalent to what can be carried by about 200 standard-gauge freight cars or about 1,800 trucks a day. The additive burden to the Chinese railroad system would be something on the order of 5,300 tons a day including about 1,000 tons a day of petroleum. This traffic would require the allocation of about 1,700 freight cars in constant operation and about 350 petroleum tank cars. In each case these allocations are only 1 to 2 percent of China's inventories of freight and tank cars. Although we cannot judge precisely how long it would take to reallocate this traffic to Chinese railroads, it would seem that the adjustments could be made well before any shortages would develop in North Vietnam because of the cessation of sea imports.

The North Vietnamese Problem

6. The total overland input of about 6,000 tons a day from China to North Vietnam could be moved on overland routes with a traffic handling capacity of 16,000 tons a day during the dry season and 13,000 tons a day during the wet season, as shown below:

| Daily Average Route Capacities | Tons per Day |
|---|---|
| Railroads | 9,000 |
| Roads | 5,400 (2,300) a/ |
| Red River | 1,500 |
| *Total* | *15,900 (12,800)* a/ |

*a. Wet season capacity from June through September.*

7. The capacity of the rail connections alone is 9,000 tons, 50 percent greater than the volume of goods that must be imported. Further, the capacity of these routes, particularly the roads, could be improved by relatively simple expedients involving mostly labor and basic construction materials.

8. North Vietnam has adequate inventories of railroad rolling stock and motor vehicles. The rolling stock inventory is estimated at 115-130 locomotives and 2,000-2,300 meter-gauge freight cars. In addition, the dual-gauged Dong Dang line could be operated with inputs from China's large inventories of some 6,000 locomotives and 160,300 freight cars.

9. The North Vietnamese truck inventory is estimated to range between 6,500 and 11,500 vehicles. There has been no evidence of a shortage of trucks, and vehicle imports during 1969 have been high. Photography also reveals that North Vietnam is maintaining large vehicle stockpiles.

10. With sizable inventories of transport equipment and Chinese cooperation, the time required to reorganize traffic movements within North Vietnam would probably range from two to three months. Given the priorities that would be attached to the task, and the considerable experience gained in keeping traffic moving during the bombings, it seems unlikely that disruption of traffic would continue for long periods. In all probability the North Vietnamese already have well-developed and detailed contingency plans to cope with the possibility of a mining program.

11. In any event the North Vietnamese appear to have stockpiles more than adequate to cope with disruptions even if they should last more than 2-3 months. Petroleum stockpiles already in-country are adequate for 100 days of operation at current consumption rates. Localized shortages would probably appear during the readjustment period, but stocks could be stretched out by stringent rationing and Communist China could give first priority to emergency petroleum shipments within a period of a few weeks at most.

12. Food stocks currently are probably at their annual low level prior to the major 10th-month harvest. Assuming a harvest at least equal to that of recent years, the stocks will reach a peak in December. Serious food shortages could not then be expected to develop until next spring and only if all food imports were continuously cut off.

13. Military stocks appear to be maintained at high levels. A variety of evidence, [redacted] indicates that North Vietnam has a deep

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cushion of military supplies. We estimate that North Vietnam has military supplies adequate for a period of at least 6 months at the 1968 level of combat.

Conclusions

14. The diversion of North Vietnam's seaborne import traffic to overland routes via China is well within the capabilities of the transport systems of China, the USSR, and North Vietnam. The immediate diversion of seaborne traffic would involve only 70,000 tons of supplies. About half of this would be diverted to Fort Bayard in China for overland movement to North Vietnam. The remaining tonnage would be recalled to Soviet ports to make the long overland transit of China.

15. A preliminary judgment indicates that the reorientation of traffic from the USSR and Eastern Europe to the Trans-Siberian railroad could probably be accomplished in two weeks.

16. The added burden on the Chinese railroads is well within their traffic capacities and would require only 1 to 2 percent of China's inventories of transport equipment.

17. Although the necessary adjustments to a mining program would probably be most disruptive in North Vietnam, the disruption should not exceed 2-3 months. Stockpiles of essential economic and military goods in North Vietnam are more than adequate to weather this period, particularly if the Chinese cooperate by making emergency shipments of some goods such as petroleum which could become in relatively short supply.

ADDI Eyes only

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2 October for
dispatch to [redacted] 25X1A9a

Please call me.
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